

**MALCOLM PIRNIE, INC.**

**PASSAIC RIVER ESTUARY  
PRE-EXPANSION ACTIVITIES  
PROGRESS REPORT**

MPI. PROJECT NO.:	0285-924
CLIENT:	USACE-KC
CONTRACT NO.:	DACW41-02-D-0003, <b>Task Orders 0008 and 0011</b>
LOCATION:	New Jersey
REPORT NO.:	5
DATES COVERED:	March 15, 2003 through April 11, 2003
EPA IAG No.:	DW96941915

**PREPARED BY:**

Bruce Fidler, Malcolm Pirnie Project Manager  
Lisa Szegedi-Greco, Deputy Project Manager

**Task Order 0008/RI/FS**

<b>Contract Action</b>	<b>Estimated Cost</b>	<b>Fixed Fee</b>	<b>Total Estimated Costs</b>
ATP 1	\$791,654	\$60,956	\$852,610
Total Authorized Amount:			\$852,610

1. WVN No. 1 was submitted on January 31, 2003 and signed by the USACE on February 4, 2003. This WVN moves dollars and hours from WAD02, subtask WO8a (95 hours and \$10,550) and WAD02, subtask WO 8g (40 hours and \$8,410) to a new task (WAD 02, WO 8k – Public Website Set-up).

**Task Order 0011/RI/FS**

<b>Contract Action</b>	<b>Estimated Cost</b>	<b>Fixed Fee</b>	<b>Total Estimated Costs</b>
ATP 1	\$306,945	\$18,317	\$325,262
Total Authorized Amount:			\$325,262

1. Submitted work basis, cost estimate and ATP for WOs 1-6 to the USACE on December 20, 2002. Conducted negotiations on the above cost estimate among USEPA, USACE, and MPI on January 6 and February 14, 2003. The final cost proposal was sent to the USACE on February 24, 2003 and the ATP was approved by the USACE on March 11, 2003.

**A. Current Status Summary (March 15, 2003 through April 11, 2003)**

**WAD 1: PROJECT MANAGEMENT**

- Conducted weekly progress teleconferences and updated and distributed Action Item List.
- Prepared and submitted fourth set of Earned Value (EV) curves and Progress Report covering the period February 8 through March 14, 2003.
- Prepared and submitted an invoice for the period covering February 8 through March 14, 2003.
- Developed EV units (Cost Track Table) and EV structure for Task Order 0011, WAD 3.

## **WAD 2: RI/FS SERVICES**

- One data source visit was conducted with the NJ Meadowlands Commission on March 27, 2003. The meeting minutes can be found on the Passaic River Estuary Management Information System (PREmis) under the calendar and under Document Management, Data Source Visits.
- Continued development of the public website; ourpassaic.org.

## **WAD 3: ADDITIONAL RI/FS SERVICES**

- Work was begun on the PEAP variance.

### ***B. Problems Encountered and Solved***

**Problem:** There are several outstanding items on the action item list that need resolution before additional work can continue. This includes, among others, scheduling a data source meeting with the N.J. Department of Environmental Protection (NJDEP), which needs a request letter from the USEPA, creating a database structure for the historical and RI/FS data, which needs a decision on the HEP/CARP Evaluation Report, and obtaining copies of relevant files from the USEPA archives, which requires a decision from USEPA on whether the copying will be conducted in-house or will be outsourced.

**Solution:** The majority of the technical work on this project will be placed on hold at USACE direction until the USEPA assigns a new Remedial Project Manager (RPM) and these issues can be resolved.

### ***C. Meetings***

- None.

### ***D. Schedule/Budget***

- Earned value curves for Task Order No. 8 and Task Order No. 11 are attached to this progress report and summarized in Attachment 1.

### ***E. Planned Activities***

- Currently, technical work on the project is suspended until a new EPA RPM is identified.

***F. Subcontractor Activity***

- HydroQual conducted the following activities during the reporting period:

On April 11, 2003, Sean O'Neil, Tom Gallagher and Paul Anid of HydroQual participated in a work review session with Bruce Fidler of Malcolm Pirnie at HydroQual offices in Mahwah, NJ. The purpose of the meeting was to review and discuss work accomplished to date as well as current budget and schedule constraints due to the project slow-down.

Preparation of graphical representations of the available data was continued. The chemicals of concern that have been represented to date are PCB's, PAH's, Dioxins, and DDT, in their dry weight form as well as their organic carbon normalized form. Fish tissue samples that are available from the database have also been depicted along with their lipid normalized counterparts.

As part of the analysis of the depicted data, several observations have been made about the spatial and temporal relationships that exist within the domain for the chemicals of concern noted above. These relationships are discussed in an interim technical memo to be submitted in the near future.

**ATTACHMENT 1**  
**SUMMARY OF COST PERFORMANCE**

## ***TABLE OF CONTENTS***

---

### Summary of Task Orders 0008 and 0011/Project Management/RI/FS Activities

#### WAD 1 Project Management Earned Value Curve

WO 1 – Project Administration .....	1
WO 2 – Meetings .....	1
WO 3 – Technical Support .....	1
WAD 1 – Expenses .....	2

#### WAD 2 RI/FS Activities Earned Value Curve

WO 1 – PEAP .....	3
WO 2 – Inventory Historical Data .....	3
WO 3 – Evaluate HEP/CARP Database .....	4
WO 5 – Conceptual Model .....	5
WO 6 – Mass Balance and Quantification .....	5
WO 7 – Evaluate HEP/CARP Framework .....	5
WO 8 – Website and GIS System .....	5
WO 10 – QCP .....	6
WAD 2 – Expenses .....	6

#### WAD 3 Additional RI/FS Activities Earned Value Curve

WO 1 – Project Management .....	7
WO 2 – Meetings .....	7
WO 3 – PEAP and Schedule .....	7
WO 4.1 – Develop Data Scheme .....	7
WO 4.2 – Populate Analytical Database .....	8
WO 5 – Website and GIS System .....	8
WO 6 – Establish Technical Expert Team .....	8

## **Task Order 0008 – Project Management**

### **WAD 1: Project Management, WO 1, Project Administration**

**Scope:** Provide overall management activities to oversee technical, subcontracting and financial activities.

**Variance Analysis:** This task is currently slightly over budget due to the billing/clerical task. This task had a larger than normal amount of hours charged to it during the last reporting period since there was a significant amount of conflict of interest (COI) duties. This included assembling resumes for all personnel allowed to work on the project, as well as establishing a COI location on Document Management in PREmis. Since this task has been completed, it is anticipated that this variance will be reduced in the future. However, this may be offset by the need to produce two separate invoices (one for Task Order 0008 and one for Task Order 0011) during all future billing cycles. Originally, this task was budgeted under the assumption that all the work would be completed under one Task Order, and that a single invoice would be prepared per month.

**Corrective Action Plan:** None. However, the costs associated with completed two invoices will be carefully tracked to determine if the budget for the billing/clerical subtask will need to be increased in a future WVN.

### **WAD 1: Project Management, WO 2, Meetings**

**Scope:** Includes cost associated with project team meetings including meetings with USACE and USEPA.

**Variance Analysis:** This task is currently behind schedule since a project meeting is scheduled every two months; however, no meetings were held in January, February, or March.

**Corrective Action Plan:** It is anticipated that regular project meetings will be held now that a new USEPA RPM has been assigned to the project.

### **WAD 1: Project Management, WO 3, Technical Support**

**Scope:** Provide support to the USACE and USEPA, as directed by the USACE. It should be noted that no technical support work was conducted during this month. However, due to a number of transfers of charges required to correct employee timesheet task assignments, a portion of the time charged did not appear in last month's earned value.

**Variance Analysis:** None

**Corrective Action Plan:** None

**WAD 1: Project Management (Expenses)**

**Scope:** Office expenses for computer and reproduction services.

**Variance Analysis:** None

**Corrective Action Plan:** None



## **Task Order 0008 – RI/FS Activities**

### **WAD 2: RI/FS Activities, WO 1, PEAP**

**Scope:** Prepare a Draft and Final PEAP utilizing Work Plans from similar sites.

**Variance Analysis:** This task, which is completed, is over budget. The reason for this is a change in the approach for development of the document. The negotiated cost was based on the assumption that the document was to be prepared quickly using readily available material previously prepared by USEPA, and utilizing Work Plans from similar sites. While Work Plans for similar sites that are available to Malcolm Pirnie may be helpful in preparing investigation plans for the next phase of work, they generally encompass tasks that bear little similarity to a number of the tasks being undertaken in this phase and were not generally helpful for this effort. Also, given the basis of the budget negotiated, it was expected that details of format and style would be of limited concern and that Malcolm Pirnie would employ typical formats used on other projects for the USEPA and the Kansas City District. Responsiveness to the greater detailed interest than anticipated in presentation styles for text and graphics has led to more iterative efforts in document preparation than expected. It is expected that as format and style appropriate to this project are developed and standardized, preparation of later documents will become more routine.

**Corrective Action Plan:** Malcolm Pirnie proposes to prepare a brief SOP incorporating format and style standards for text and graphics agreed upon for this project to guide the various technical teams for future deliverables.

### **WAD 2: RI/FS Activities, WO 2, Inventory Historical Data**

**Scope:** Create an inventory of historical data, reports, and papers pertinent to the Passaic River Estuary. This includes creating an overview report that lists all potential sources that were identified, as well as gives a brief summary of what information is available from each source. This task also includes researching, assembling, and evaluating readily available base mapping for the Passaic River Estuary and creating a mapping overview report.

**Variance Analysis:** This task is currently slightly over budget and slightly behind schedule. The reason this task is over budget is because WO02, Task 2f, which is completed, is over budget. There are several reasons contributing to this. First, the negotiated cost was based on a study area limited to the 17-mile tidally influenced area of the Passaic River. The budget assumption was that the primary source of base mapping data would be the NJDEP, which was known to have high quality mapping for this study area. We anticipated acquiring key datasets (primarily from NJDEP) and identifying additional local sources and studies within this study area only. However, this scope was expanded to support the development of public presentation graphics that included the entire watershed area extending into New York State. This required the

acquisition and evaluation of additional data sources, and the resolution of inconsistencies between data from multiple state and federal sources.

Second, preparation of presentation and PEAP mapping was a highly iterative process. Significant efforts were expended in determining formats and styles of the various maps being prepared, as well as ongoing discussions as to the precise boundaries of the areas to be shown on the maps. In addition, while the available data layers were highly detailed, it was felt that simplified versions would be more appropriate to best communicate the material to the public as the project moves forward. To this end, the available data required reformatting to reduce the level of detail, which was also an iterative process.

This task is behind schedule for several reasons; 1) It was anticipated that document copying would have already started, and 2) Since many of the initial data source contacts were obtained from the USEPA, this task has been conducted for less budget than anticipated. However, it is anticipated that this variance will be reduced in the future as previously unidentified data sources are discovered; and 3) One of the major data source visits (the NJDEP) cannot be conducted until the USEPA obtains access.

**Corrective Action Plan:** Once a new USEPA RPM is assigned, and several of the action items are cleared up, it is anticipated that work will again begin on this task. It should be noted that it is anticipated that the budget variance will increase in the future as other subtasks such as since copying and scanning are started since some of the assumptions used in the cost estimate were inaccurate. For example, the following assumptions were made:

- There would be 100, 100-page reports to be copied and scanned
- The reports can be removed from the data source for copying

Currently, eight data source site visits have been completed, and it is anticipated that at least three more data source visits will be required. So far, approximately 250 reports that need to be copied have been identified. It is unlikely that any of the identified data sources will allow the reports to be removed from the premises for copying purposes.

## **WAD 2: RI/FS Activities, WO 3, Evaluate HEP/CARP Database**

**Scope:** Evaluate the viability of integrating the existing HEP/CARP database with the system-wide database being developed for the project.

**Variance Analysis:** None

**Corrective Action Plan:** None

## **WAD 2: RI/FS Activities, WO 5, Conceptual Model**

**Scope:** Develop an understanding of the processes affecting the fate and bioaccumulation of metals and organic chemicals within the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, technical work on the project has been slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** A new USEPA RPM has recently been assigned to the project. Therefore, it is anticipated that work on this task will resume.

## **WAD 2: RI/FS Activities, WO 6, Mass Balance and Quantification**

**Scope:** Create and estimate of the mass of each contaminant of concern present in the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, technical work on the project has been slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** A new USEPA RPM has recently been assigned to the project. Therefore, it is anticipated that work on this task will resume.

## **WAD 2: RI/FS Activities, WO 7, Evaluate HEP/CARP Framework**

**Scope:** Review the HEP/CARP framework with respect to applicability to the contaminants of concern in the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, technical work on the project has been slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** A new USEPA RPM has recently been assigned to the project. Therefore, it is anticipated that work on this task will resume.

## **WAD 2: RI/FS Activities, WO 8, Website and GIS System**

**Scope:** Create a Passaic River Estuary Project Web Site/Database that will serve as the access point for all study data, documents, and project related files.

**Variance Analysis:** This task is currently slightly under budget since the Document Management System and Management Reports were completed under budget. However, since comments on the Management Reports have not yet been received, it is possible that this variance will decrease in the future.

**Corrective Action Plan:** None

**WAD 2: RI/FS Activities, WO 10, QCP**

**Scope:** Prepare a Draft and Final QCP.

**Variance Analysis:** This task, which is complete, is over budget. The reason for this is that this document was prepared in concert with the PEAP and, similarly, responsiveness to the greater detailed interest than anticipated in presentation styles for text and graphics has led to more iterative efforts in document preparation than expected.

**Corrective Action Plan:** It is expected that a brief SOP standardizing format and style for maps and graphics, as discussed for WO 1, will guide future work products.

**WAD 2: Investigation Support (Expenses)**

**Scope:** Office expenses for computer and reproduction services and subcontractor fee.

**Variance Analysis:** The subcontractor fee task is slightly behind schedule. The work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project in May since a new USEPA RPM has now been assigned.

## **Task Order 0011 – Additional RI/FS Activities**

### **WAD 3: Additional RI/FS Activities, WO 1, Project Management**

**Scope:** Provide overall management activities for Battelle to oversee technical and financial activities.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

### **WAD 3: Additional RI/FS Activities, WO 2, Meetings**

**Scope:** Includes cost associated with project team meetings including meetings with MPI, USACE and USEPA.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

### **WAD 3: Additional RI/FS Activities, WO 3, PEAP and Schedule**

**Scope:** Includes cost associated with amending the PEAP and QCP to reflect additional tasks that are part of WAD 3.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

### **WAD 3: Additional RI/FS Activities, WO 4.1, Develop Data Scheme**

**Scope:** Includes cost associated with conducting a review of all of the data collected for the project and establishing its relevance to the site. This will include creating a database structure, establishing an initial data quality scheme, and making an interim decision on the relevance of each report.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

### **WAD 3: Additional RI/FS Activities, WO 4.2, Populate Analytical Database**

**Scope:** Includes cost associated with populating the project database with both electronic and hardcopy data. This will consist of manual data entry of hardcopy data and the associated quality assurance, amending the format of data source databases to be compatible with the project database and then uploading the data, creating a memo that documents the approach used for these activities, and management and oversight.

**Variance Analysis:** None

**Corrective Action Plan:** None

### **WAD 3: Additional RI/FS Activities, WO 5, Website and GIS System**

**Scope:** Includes cost associated with providing technical support and management for the project website creating under WAD 2. This also includes integrating HWP/CARP with the Passaic River Estuary database.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

### **WAD 3: Additional RI/FS Activities, WO 6, Establish Technical Expert Team**

**Scope:** Includes cost associated with identifying specialty areas crucial to the project as well as recognized experts in each area, selecting one expert in each field to work on the project, and establishing subcontracts with each of the selected experts.

**Variance Analysis:** This task is behind schedule since the work was slowed down at USACE direction until a new USEPA RPM is assigned.

**Corrective Action Plan:** It is anticipated that work will resume on the project now that a new USEPA RPM has been assigned.

**SUMMARY OF TASK ORDER NO. 0008**  
**MANAGEMENT, SUPPORT, AND INVESTIGATION**  
**3/15/03 - 4/11/03**

Task Order No. 0008	Current Budget Cost (BC)	Scheduled Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Estimate to Complete (ETC)	Estimate at Completion (EAC)
WAD 01 (Project Management Administration)	\$ 227,770	\$ 120,987	\$ 113,745	48.8%	\$ 109,933	\$ 116,178	\$ 228,046
WAD 02 (RI/FS Services)	\$ 563,885	\$ 401,507	\$ 280,252	49.1%	\$ 274,488	\$ 266,293	\$ 537,954
NA (Fee)	\$ 60,956	\$ 40,231	\$ 8,739	48.7%	NA	\$ 30,598	\$ 61,280
<b>Total (Less Fee)</b>	<b>\$ 791,655</b>	<b>\$ 522,494</b>	<b>\$ 393,997</b>	<b>48.7%</b>	<b>\$ 384,422</b>	<b>\$ 382,470</b>	<b>\$ 766,001</b>

Task Order No. 0008	Cost Variance (CVAR)	Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio
WAD 01 (Project Management Administration)	\$ (2,632)	\$ (9,889)	0.98	0.92	0.90
WAD 02 (RI/FS Services)	\$ (3,553)	\$ (115,657)	0.99	0.69	0.68
NA (Fee)	NA	NA	NA	NA	NA
<b>Total (Less Fee)</b>	<b>\$ (6,185)</b>	<b>\$ (125,546)</b>	<b>0.98</b>	<b>0.74</b>	<b>1.33</b>

Prepared 4/28/03

	MPI	HQI	Battelle	Total
Total Budget	\$553,244	\$275,935	\$23,432	\$852,611
Total Expended	\$181,851	\$62,303	\$18,548	\$262,702
Remaining Funds	\$371,393	\$213,632	\$4,884	\$589,909
Schedule Status	Work slightly behind schedule	Work slightly behind schedule	On Schedule	

**Calculations:**

PCT = (BCWP/BC) X 100\*

ETC = (BAC-BCWP)/(BCWP/ACWP)\*\*

CAC = ACWP + ETC

CVAR=ACWP-BCWP

SVAR=BCWS-BCWP

CPI = BCWP/ACWP

SPI = BCWP/BCWS

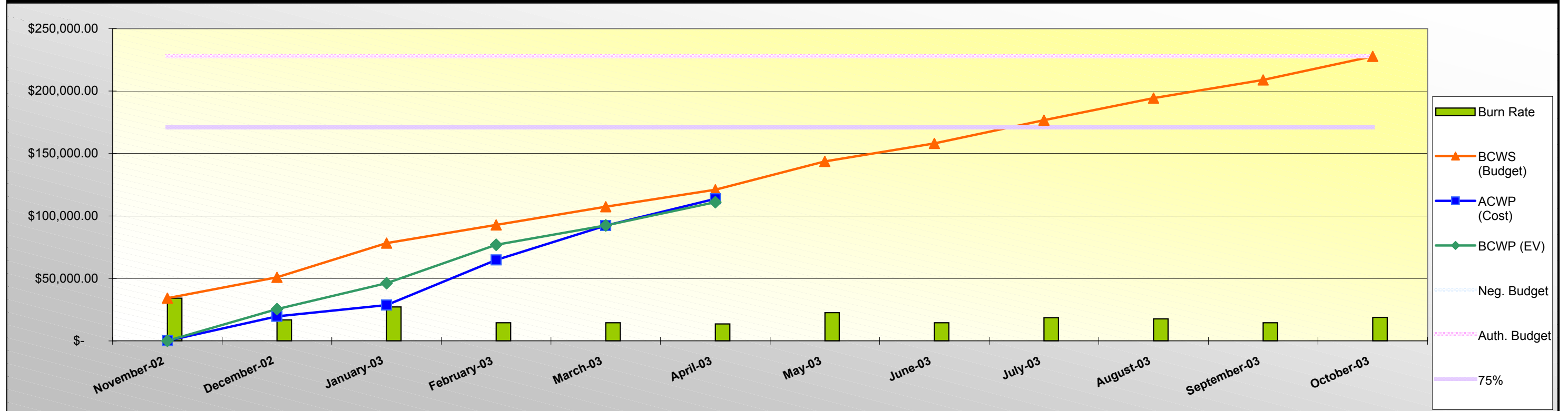
\* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

\*\* - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	Burn Rate - WAD01	Burn Rate - WAD02	Burn Rate - Total
Nov-02	\$ 34,181	\$ 46,654	\$ 80,835
Dec-02	\$ 16,828	\$ 38,149	\$ 54,977
Jan-03	\$ 27,265	\$ 113,045	\$ 140,310
Feb-03	\$ 14,548	\$ 67,366	\$ 81,915
Mar-03	\$ 14,548	\$ 75,705	\$ 90,253
Apr-03	\$ 13,617	\$ 70,918	\$ 84,535
May-03	\$ 22,616	\$ 55,405	\$ 78,021
Jun-03	\$ 14,548	\$ 34,263	\$ 48,812
Jul-03	\$ 18,570	\$ 28,976	\$ 47,546
Aug-03	\$ 17,664	\$ 28,895	\$ 46,559
Sep-03	\$ 14,548	\$ 2,400	\$ 16,949
Oct-03	\$ 18,836	\$ 2,108	\$ 20,945
<b>Burn Rate - Total by WAD</b>	<b>\$ 227,770</b>	<b>\$ 563,885</b>	<b>\$ 791,655</b>

## Cost/Schedule Through April 11th, 2003

### Summary of WAD 1 Task Order 0008 - Project Management Administration



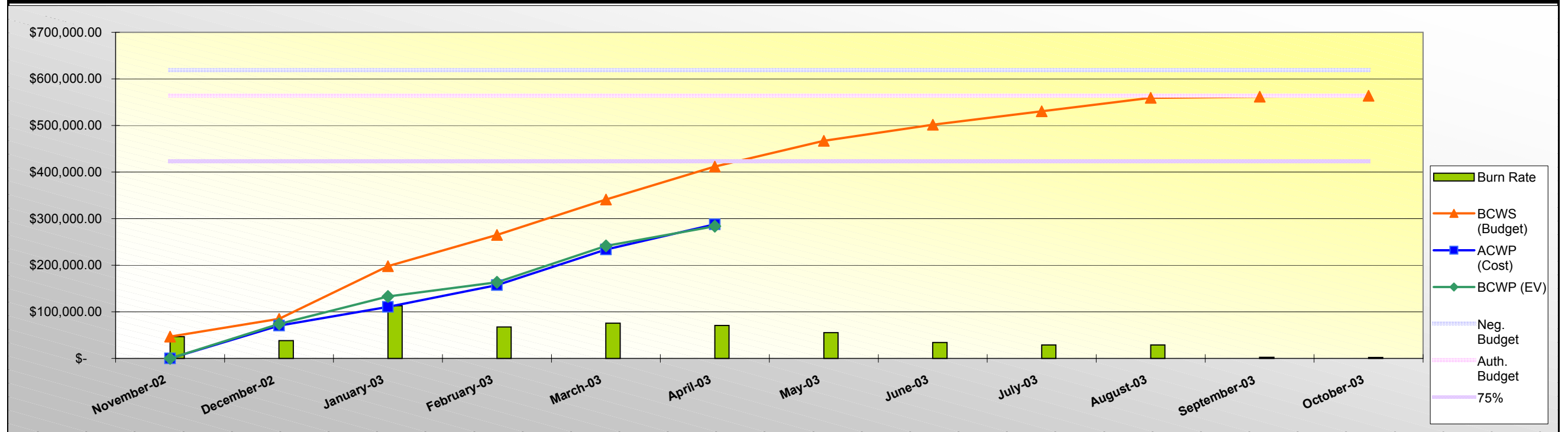
WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
1	1	00	Project Administration/Reporting	\$ 141,356.00	\$ 71,750.66	\$ 77,102.16	50.8%	\$ 71,750.66	\$ 74,796.83	\$ 151,898.99	\$ (5,351.50)	\$ -
1	2	00	Meetings	\$ 23,496.00	\$ 15,553.50	\$ 4,974.00	32.7%	\$ 7,693.58	\$ 10,216.47	\$ 15,190.47	\$ 2,719.58	\$ (7,859.92)
1	3	00	Technical Support	\$ 35,901.00	\$ 19,293.85	\$ 17,836.62	49.7%	\$ 17,836.62	\$ 18,064.38	\$ 35,901.00	\$ -	\$ (1,457.23)
1	0	00	Labor Totals	\$ 200,753.00	\$ 106,598.01	\$ 99,912.78	48.5%	\$ 97,280.86	\$ 103,077.68	\$ 202,990.46	\$ (2,631.92)	\$ (9,317.15)
1	0	00	Expenses(Computer/Reproduction)	\$ 25,056.00	\$ 12,528.00	\$ 11,955.99	47.7%	\$ 11,955.99	\$ 13,100.01	\$ 25,056.00	\$ -	\$ (572.01)
1	0	00	Travel and Lodging Expenses	\$ 300.00	\$ 200.00	\$ 1,179.20	393.1%	\$ 1,179.20	\$ (879.20)	\$ 300.00	\$ -	\$ 979.20
1	0	00	Subcontractor Fee	\$ 1,661.00	\$ 1,661.00	\$ 696.60	41.9%	\$ 696.60	\$ 964.40	\$ 1,661.00	\$ -	\$ (964.40)
1	0	00	WAD Fee(Less Travel)	\$ 18,064.72	\$ 9,530.08	\$ 8,738.95	48.4%	\$ -	\$ 9,294.22	\$ 18,243.72	\$ -	\$ -
1	0	00	Job To DateTotals(Less Fee)	\$ 227,770.00	\$ 120,987.01	\$ 113,744.57	48.8%	\$ 111,112.65	\$ 116,177.69	\$ 228,046.46	\$ (2,631.92)	\$ (9,889.16)

**Note:** The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.



## Cost/Schedule Through April 11th, 2003

### Summary of WAD 2 Task Order 0008 - RI/FS Services



WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
2	1	00	Pre-Expansion Activity Plan	\$ 41,668.80	\$ 41,668.80	\$ 45,955.43	100.0%	\$ 41,668.80	\$ -	\$ 45,955.43	\$ (4,286.63)	\$ -
2	2	00	Inventory Historical Data	\$ 68,448.87	\$ 68,448.87	\$ 54,529.07	70.4%	\$ 48,215.89	\$ 22,882.20	\$ 77,411.27	\$ (6,313.18)	\$ (20,232.98)
2	3	00	Evaluate HEP/CARP Database	\$ 34,044.72	\$ 34,044.72	\$ 29,697.63	100.0%	\$ 34,044.72	\$ -	\$ 29,697.63	\$ 4,347.09	\$ -
2	5	00	Develop Detailed Conceptual Model	\$ 88,894.00	\$ 71,115.20	\$ 47,186.17	53.1%	\$ 47,186.17	\$ 41,707.83	\$ 88,894.00	\$ -	\$ (23,929.03)
2	6	00	Prelim Contaminant Mass Balance and In-Situ Mass Quantification	\$ 164,160.06	\$ 64,493.36	\$ 2,631.00	1.6%	\$ 2,639.00	\$ 161,031.42	\$ 163,662.42	\$ 8.00	\$ (61,854.36)
2	7	00	Evaluate HEP/CARP Tier 2 Modeling Framework	\$ 11,214.00	\$ 11,214.00	\$ 2,089.84	23.0%	\$ 2,579.00	\$ 6,997.20	\$ 9,087.04	\$ 489.16	\$ (8,635.00)
2	8	00	Development and Implementation Website/GIS	\$ 105,415.49	\$ 77,245.41	\$ 67,818.01	69.8%	\$ 73,548.37	\$ 29,384.26	\$ 97,202.27	\$ 5,730.36	\$ (3,697.04)
2	10	00	Quality Control Plan	\$ 8,802.70	\$ 8,802.70	\$ 11,812.33	94.1%	\$ 8,284.70	\$ 738.56	\$ 12,550.89	\$ (3,527.63)	\$ (518.00)
2	0	00	Labor Totals	\$ 522,648.64	\$ 377,033.06	\$ 261,719.48	49.4%	\$ 258,166.65	\$ 262,741.47	\$ 524,460.95	\$ (3,552.83)	\$ (118,866.41)
2	0	00	Expenses(Less Travel)	\$ 13,493.36	\$ 6,733.00	\$ 9,942.11	73.7%	\$ 9,942.11	\$ 3,551.25	\$ 13,493.36	\$ -	\$ 3,209.11
1	0	00	Travel and Lodging Expenses	\$ 2,738.00	\$ 2,738.00	\$ 2,211.20	80.8%	\$ 2,211.20	\$ 526.80	\$ 2,738.00	\$ -	\$ (526.80)
1	0	00	Subcontractor Fee	\$ 25,005.00	\$ 15,003.00	\$ 6,379.46	25.5%	\$ 6,379.46	\$ 18,625.54	\$ 25,005.00	\$ -	\$ (8,623.54)
2	0	00	WAD Fee(Less Travel)	\$ 42,891.36	\$ 30,701.28	\$ -	50.0%	\$ -	\$ 21,303.42	\$ 43,036.34	\$ -	\$ -
2	0	00	Job To DateTotals(Less Fee)	\$ 563,885.00	\$ 401,507.06	\$ 280,252.25	49.1%	\$ 276,699.42	\$ 266,292.72	\$ 537,954.31	\$ (3,552.83)	\$ (115,657.30)

**Note:** The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

**SUMMARY OF TASK ORDER NO. 0011**  
**ADDITIONAL RI/FS SERVICES**  
**3/15/03 - 4/11/03**

Task Order No. 0011	Current Budget Cost (BC)	Scheduled Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Estimate to Complete (ETC)	Estimate at Completion (EAC)
WAD 03 (Project Management Administration)	\$ 306,947	\$ 90,947	\$ 4,759	1.95%	\$ 5,996	#DIV/0!	#DIV/0!
NA (Fee)	\$ 20,855	\$ 6,209	\$ 420	1.95%	NA	#DIV/0!	#DIV/0!
<b>Total (Less Fee)</b>	<b>\$ 306,947</b>	<b>\$ 90,947</b>	<b>\$ 4,759</b>	<b>1.95%</b>	<b>\$ 5,996</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

Task Order No. 0011	Cost Variance (CVAR)	Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio
WAD 03 (Project Management Administration)	\$ 1,237	\$ (289,644)	1.26	0.07	0.08
NA (Fee)	NA	NA	NA	NA	NA
<b>Total (Less Fee)</b>	<b>\$ 1,237</b>	<b>\$ (289,644)</b>	<b>1.26</b>	<b>0.07</b>	<b>19.11</b>

Prepared 4/28/03

Since only a minimal amount of work has been conducted on this project, the ETC and EAC cannot be accurately calculated.

	MPI	Battelle	Total
Total Budget	\$187,514	\$137,748	\$325,262
Total Expended	\$5,140	\$0	\$5,140
Remaining Funds	\$182,374	\$137,748	\$320,122
Schedule Status	Behind Schedule	Behind Schedule	

Note: WAD 03 is behind schedule due to a slow down period while the USEPA was transitioning between RPM's.

**Calculations:**

PCT = (BCWP/BC) X 100\*

ETC = (BAC-BCWP)/(BCWP/ACWP)\*\*

CAC = ACWP + ETC

CVAR=ACWP-BCWP

SVAR=BCWS-BCWP

CPI = BCWP/ACWP

SPI = BCWP/BCWS

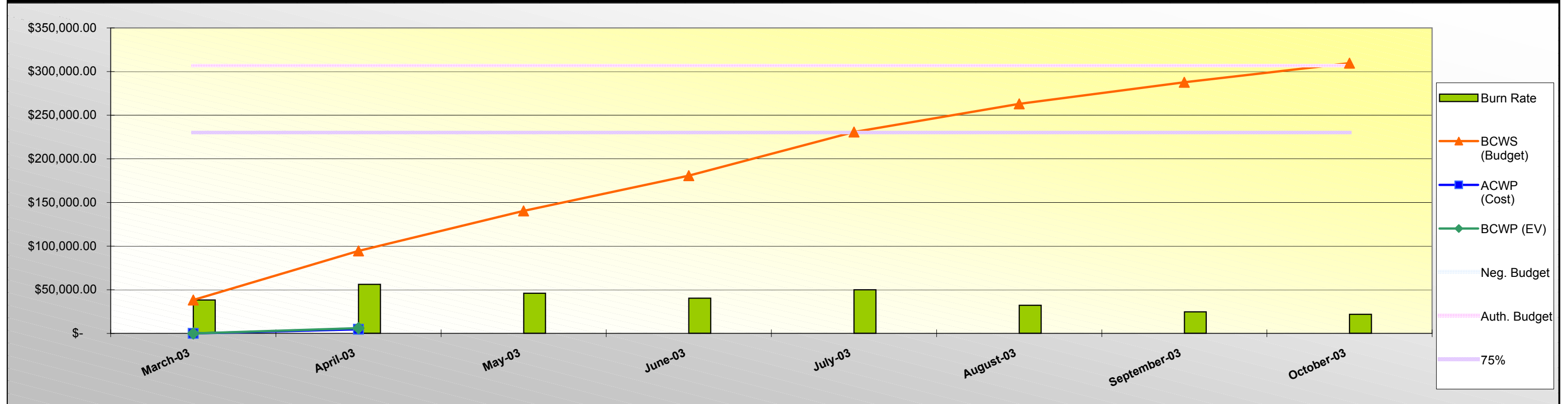
\* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

\*\* - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	Burn Rate - WAD03	Burn Rate - Total
Mar-03	\$ 38,223	\$ 38,223
Apr-03	\$ 55,019	\$ 55,019
May-03	\$ 45,855	\$ 45,855
Jun-03	\$ 40,281	\$ 40,281
Jul-03	\$ 48,837	\$ 48,837
Aug-03	\$ 32,260	\$ 32,260
Sep-03	\$ 24,610	\$ 24,610
Oct-03	\$ 21,860	\$ 21,860
<b>Burn Rate - Total by WAD</b>	<b>\$ 306,945</b>	<b>\$ 306,945</b>

## Cost/Schedule Through April 11th, 2003

### Summary of WAD 3 Task Order 0011 - Additional RI/FS Services



WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
3	1	00	Project Administration/Reporting	\$ 9,702.00	\$ 1,564.85	\$ -	#DIV/0!	\$ 1,564.85	#DIV/0!	#DIV/0!	\$ 1,564.85	\$ (7,511.28)
3	2	00	Meetings	\$ 6,462.00	\$ 3,231.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (6,462.00)
3	3	00	PEAP and Schedule	\$ 11,099.00	\$ 11,099.00	\$ 1,870.32	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ (1,870.32)	\$ (11,099.00)
3	4	00	Populate & QC Database	\$ 101,216.00	\$ 37,193.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (101,216.00)
3	4.1	00	Develop Data Scheme	\$ 45,800.00	\$ 37,193.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (45,800.00)
3	4.2	00	Populate Analytical Database	\$ 55,416.00	\$ -	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (55,416.00)
3	5	00	Website and GIS System	\$ 139,084.00	\$ 29,200.30	\$ 2,691.51	\$ -	\$ 4,234.00	#DIV/0!	#DIV/0!	\$ 1,542.49	\$ (133,181.18)
3	6	00	Establish Technical Expert Team	\$ 23,740.00	\$ 4,748.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (23,740.00)
1	0	00	Labor Totals	\$ 291,303.00	\$ 87,036.15	\$ 4,561.83	#DIV/0!	\$ 5,798.85	#DIV/0!	#DIV/0!	\$ 1,237.02	\$ (283,209.46)
1	0	00	Expenses(Computer/Reproduction)	\$ 6,632.00	\$ 1,658.00	\$ 196.98	#DIV/0!	\$ 196.98	#DIV/0!	#DIV/0!	\$ -	\$ (6,435.02)
1	0	00	Travel and Lodging Expenses	\$ -	\$ -	\$ -	#DIV/0!	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ -
1	0	00	Subcontractor Fee	\$ 9,012.00	\$ 2,253.00	\$ -	#DIV/0!	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (9,012.00)
1	0	00	WAD Fee(Less Travel)	\$ 20,855.45	\$ 6,208.59	\$ 419.71	2.0%	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ -
1	0	00	Job To DateTotals(Less Fee)	\$ 306,947.00	\$ 90,947.15	\$ 4,758.81	2.0%	\$ 5,995.83	#DIV/0!	#DIV/0!	\$ 1,237.02	\$ (289,644.48)

**Note:** The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.